

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000683

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H01J 49/00

According to International Patent Classification (IPC) or to both: national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6610978 B2 (HONGFENG YIN ET AL), 26 August 2003 (26.08.2003), [0017]-[0073];[0058];[0069]	1-2,4-9,13, 17-28,30-32
Y	--	3,12
X	EP 0452930 A3 (HITACHI, LTD), 23 October 1991 (23.10.1991), column 4, line 22 - line 47, abstract	1-2,4,7-9, 17,24-25
Y	--	
Y	US 5259254 A (JIANZHONG ZHU ET AL), 9 November 1993 (09.11.1993), column 2, line 50 - line 63	3,12
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Further documents are listed in the continuation of Box C.



See patent family annex.

### \* Special categories of cited documents

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

1 June 2005

Date of mailing of the international search report

09-06-2005

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 0041214 A1 (NORT-EASTERN UNIVERSITY), 13 July 2000 (13.07.2000), see whole document --	13,30-32
A	US 5750988 (JAMESA. APFFEL ET AL), 12 May 1998 (12.05.1998), abstract -- -----	13,30-32

# INTERNATIONAL SEARCH REPORT

Information on patent family members

30/04/2005

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